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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,493	10/31/2000	Peter W. Estelle	NOR-937	9829

7590

04/11/2002

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EXAMINER

KEASEL, ERIC S

ART UNIT

PAPER NUMBER

3754

DATE MAILED: 04/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/702,493

Applicant(s)

ESTELLE

Examiner

Eric Keasel

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3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 5-15, 17, 18, 24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 16 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicant is reminded of the duty to disclose all information known to be material to patentability as defined in 37 CFR 1.56.

Election/Restrictions

2. Applicant's election of Group II, Species IIA in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
3. Claims 5-15, 17, 18, 24, and 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species and/or groups, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, "said waveform generator" lacks antecedent basis.

Claim 23 appears to be directed to the point that different power supplies can be used with the invention. However, as written, it is vague and indefinite as to whether the power supplies are simultaneously connected to the solenoid or whether there is only one power supply connected at a time.

In light of the above informalities, the claims have been examined as could best be understood by the examiner. The examiner's failure to apply prior art to any of the claims should not be construed as an indication of allowable subject matter.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 16, and 19-23 (as understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Nojima (US Patent Number 5,812,355) in view of Oyama et al. (US Patent Number 4,878,147).

Nojima discloses the fluid dispenser for dispensing a fluid onto a substrate with a solenoid-actuated dispensing valve, power supply, and driver circuit (along with the associated method), but fails to disclose the details of the driver circuit initial peak current having a duration determined as an inverse function of the output voltage of the power supply. Oyama et al. disclose a similar driver circuit with initial peak and holding currents with the duty ratio (duration) reduced inversely proportional to the power supply voltage. It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to have used the driver circuit of Oyama et al. with the fluid dispenser of Nojima in order to overcome the problems of different values of the power supply from a production efficiency standpoint as taught by Oyama et al. (see column 1, line 12 to column 2, line 18).

8. Claims 1-4, 16, and 19-23 (as understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Nojima (US Patent Number 5,812,355) in view of Ohtsuka (US Patent Number 5,737,172).

Nojima discloses the fluid dispenser for dispensing a fluid onto a substrate with a solenoid-actuated dispensing valve, power supply, and driver circuit (along with the associated method), but fails to disclose the details of the driver circuit initial peak current having a duration determined as an inverse function of the output voltage of the power supply. Ohtsuka discloses a similar driver circuit with initial peak and holding currents with the pulse width for a voltage value decreasing in inverse proportion to the power supply voltage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the driver circuit of Ohtsuka with the fluid dispenser of Nojima so that the absorbing force and an input to the coil can be maintained at a constant level, irrespective of the voltage value as taught by Ohtsuka (see column 4, lines 54-59).

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

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Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-4, 16, and 19-21 are provisionally rejected under the judicially created doctrine

of obviousness-type double patenting as being unpatentable over claim 4 of copending

Application No. 09/880,649 (commonly assigned to Nordson Corporation). Although the

conflicting claims are not identical, they are not patentably distinct from each other because

claim 4 anticipates all claim limitations in claims 1-4 and the method claims 16 and 19-21 are the inherent method of using the device of claim 4 of copending, commonly assigned application no. 09/880,649.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Gordon et al., Sloan, D'Onofrio, Russell et al., Bender et al., Zechmann et al.,

Goodnight et al., Mori et al., and Kono et al. disclose similar devices.


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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry C. Yuen can be reached on (703) 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3588 for regular communications and (703) 305-3588 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

EK 7 APR 02
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April 7, 2002


Lesley D. Morris
Primary Examiner
AK 3752